

## IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of

Akira USUI et al.

Conf.

Application No. NEW NATIONAL PHASE

Group

Filed December 30, 2004

Examiner

GROUP III NITRIDE SEMICONDUCTOR  
SUBSTRATE FOR PROCESS FOR PRODUCTION  
THEREOFINFORMATION DISCLOSURE STATEMENT  
(SUBMISSION CONCURRENT WITH THE  
FILING OF A NEW PATENT APPLICATION)Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

December 30, 2004

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, and in fulfillment of the duty of disclosure under 37 C.F.R. § 1.56, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

The patents, publications, or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

II. COPIES

- ☐ Copies of the U.S. patents or publications are not submitted since the USPTO has waived their submission for applications filed after June 30, 2003.
- ☐ Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
- ☒ This application is a National Phase of a PCT application. Some or all of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should have been forwarded from the International Search Authority pursuant to the trilateral agreement between the USPTO, EPO and JPO, or they are U.S. patents or U.S. published applications. If copies are needed, please contact the undersigned.

DT15 R000 PCT/PTO 30 DEC 2004

III. CONCISE EXPLANATION OF THE RELEVANCE  
(check at least one box)

a. ☐ **DOCUMENTS IN THE ENGLISH LANGUAGE**

The attached non U.S. patents, non U.S. patent application publications, foreign publications, or other information in the English language do not require a statement of relevancy.

b. ☒ **DOCUMENTS NOT IN THE ENGLISH LANGUAGE**

A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

English patent abstracts have been provided for the Japanese patents.

c. ☒ **FOREIGN SEARCH REPORT OR ACTION**

An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(A)(3).

d. ☐ **OTHER**

The following additional information is provided for the Examiner's consideration.

FEES

This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

If The Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned.

Respectfully submitted,

YOUNG & THOMPSON

*Benoit Castel*

Benoit Castel, Reg. No. 35,041  
745 South 23<sup>rd</sup> Street  
Arlington, VA 22202  
Telephone (703) 521-2297  
Telefax (703) 685-0573  
(703) 979-4709

BC/at

Enclosures: ☒ Form PTO-1449(s)  
☒ Documents  
☒ Foreign Search Report  
☐ Other: \_\_\_\_\_

Attorney Docket No.:  
**8017-1156**

(Use several sheets if necessary)

Applicant:  
**Akira USUI et al.**

Filing Date:  
**December 30, 2004**

Group Art Unit:

[illegible]

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
	1 271 627	1/2/2003	EUROPE				
	63-188983	8/4/1988	JAPAN			X	
	10-312971	11/24/1998	JAPAN			X	
	2000-012900	1/14/2000	JAPAN			X	
	2001-223165	8/17/2001	JAPAN			X	
	2001-284643	10/12/2001	JAPAN			X	
	2002-050585	2/15/2002	JAPAN			X	
	2002-050586	2/15/2002	JAPAN			X	
	2002-343718	11/29/2002	JAPAN			X	
	2003-178984	6/27/2003	JAPAN			X	

	By Tsvetanka S. Zheleva et al., "Pendeo-Epitaxy - A New Approach for Lateral Growth of Gallium Nitride Structures", MRS Internet J. Nitride Semicond. Res. 4S1, G3.38, 1999, pages 2-7.
	By Ok-Hyun Nam et al., "Lateral Epitaxy of Low Defect Density GaN Layers Via Organometallic Vapor Phase Epitaxy", Appl. Phys. Lett., 71 (18), November 3, 1997, pages 1-4
	By Masaru Kuramoto et al., "Room-Temperature Continuous-Wave Operation of InGaN Multi-Quantum-Well Laser Diodes Grown on an n-GaN Substrate with a Backside n-Contact", Japanese Journal of Applied Physics, Vol. 38, No. 2B, February 15, 1999, pages 1-4.
	By Michael Kelly et al., "Large Free-Standing GaN Substrates by Hydride Vapor Phase Epitaxy and Laser-Induced Liftoff", Japanese Journal of Applied Physics, Vol. 38, No. 3A, March 1, 1999, pages 1-4.

EXAMINER:

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

\* English language abstract provided for the Examiner's convenience